

8.0 BIBLIOGRAPHY

- Anderson, B.S., J.W. Hunt, S.L. Turpen, A.R. Coulon, M. Martin, D.L. Denton, and F.H. Palmer. 1990. *Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project*. California State Water Resources Control Board. No. 90-10WQ.
- Anderson, S.L., and T.J. Norberg-King. 1991. Precision of short-term chronic toxicity tests in the real world. *Environ. Toxicol. Chem.* 10(2):143–145.
- APHA-AWWA-WEF. 1998. *Standard Methods for the Examination of Water and Wastewater* (20th Edition). L.S. Clesceri, A.E. Greenberg, and A. Eaton, eds. American Public Health Association, American Water Works Association, and Water Environment Federation. Washington, DC. ISBN 0-87553-235-7/WB.
- American Society for Testing and Materials (ASTM). 1992. *Standard Practice for Conducting an Interlaboratory Study To Determine the Precision of a Test Method*. E691-92.
- ASTM. 1998. *Standard Practice for Determination of Precision and Bias of Applicable Test Methods of Committee D-19 on Water*. D2777.
- Ausley, L.W. 1996. Effluent toxicity testing variability. In *Whole Effluent Toxicity Testing: An Evaluation of Methods and Prediction of Receiving System Impacts*. D.R. Grothe, K.L. Dickson, and D.K. Reed-Judkins, eds. Pensacola, FL: SETAC Press, 157–171.
- Bailer, A.J., M.R. Hughes, D.L. Denton, and J.T. Oris. 2000. An empirical comparison of effective concentration estimators for evaluating aquatic toxicity test responses. *Environ. Toxicol. Chem.* 19(1): 141-150.
- Biomonitoring Science Advisory Board (BSAB). 1994. *West Coast Marine Species Chronic Protocol Variability Study*. Washington Department of Ecology. Olympia, WA.
- Burton, G.A., A. Raymon, L.A. Ausley, J.A. Black, G.M. DeGraeve, F.A. Fulk, J.F. Heltshe, W.H. Peltier, J.J. Pletl, and J.H. Rodgers. 1996. Session 4: Effluent toxicity test variability. In *Whole Effluent Toxicity Testing: An Evaluation of Methods and Prediction of Receiving System Impacts*. D.R. Grothe, K.L. Dickson, and D.K. Reed-Judkins, eds. Pensacola, FL: SETAC Press, 131–156.
- Chapman, G.A. 1992. *Sea Urchin (Strongylocentrotus purpuratus) Fertilization Test Method*. USEPA ERL-Narragansett, Pacific Ecosystems Branch. Newport, OR.
- Chapman, G.A., B.S. Anderson, A.J. Bailer, R.B. Baird, R. Berger, D.T. Burton, D.L. Denton, W.L. Goodfellow, M.A. Heber, L.L. McDonald, T.J. Norberg-King, and P.L. Ruffier. 1996a. Discussion synopsis, methods and appropriate endpoints. In *Whole Effluent Toxicity Testing: An Evaluation of Methods and Prediction of Receiving System Impacts*. D.R. Grothe, K.L. Dickson, and D.K. Reed-Judkins, eds. Pensacola, FL: SETAC Press, 51-82.
- Chapman, P.F., M. Crane, J. Wiles, F. Noppert, and E. McIndoe. 1996b. Improving the quality of statistics in regulatory ecotoxicity tests. *Ecotoxicol.* 5:169-186.
- Chapman, P.M., R.S. Caldwell, and P.F. Chapman. 1996c. A warning: NOECs are inappropriate for regulatory use. *Environ. Toxicol. Chem.* 15:77–79.

- Collett, D. 1991. *Modelling Binary Data*. London: Chapman & Hall.
- Commonwealth of Virginia. 1993. *Toxics Management Program Implementation Guidance*.
- Davis, R.B., A.J. Bailer, and J.T. Oris. 1998. Effects of organism allocation on toxicity test results. *Environ. Toxicol. Chem.* 17(5): 928-931.
- DeGraeve, G.M., J.D. Cooney, B.H. Marsh, T.L. Pollock, N.G. Reichenbach, J.H. Dean, and M.D. Marcus. 1991. Variability in the performance of the seven-day fathead minnow (*Pimephales promelas*) larval survival and growth test: A within- and among-laboratory study. *Environ. Toxicol. Chem.* 10(9):1189-1203.
- DeGraeve, G.M., J.D. Cooney, B.H. Marsh, T.L. Pollock, and N.G. Reichenbach. 1992. Variability in the performance of the 7-d *Ceriodaphnia dubia* survival and reproduction test: A within- and among-laboratory study. *Environ. Toxicol. Chem.* 11(6):851-866.
- DeGraeve, G.M., G. Smith, W. Clement, D. McIntyre, and T. Forgette. 1998. *WET Testing Program: Evaluation of Practices and Implementation*. Water Environment Research Foundation. Project 94-HHE-1. Alexandria, VA.
- Denton, D.L., and T.J. Norberg-King. 1996. Whole effluent toxicity statistics: A regulatory perspective. In *Whole Effluent Toxicity Testing: An Evaluation of Methods and Prediction of Receiving System Impacts*. D.R. Grothe, K.L. Dickson, and D.K. Reed-Judkins, eds. Pensacola, FL: SETAC Press, 83-102.
- Denton, D.L., and M. Narvaez. 1996. *Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*. U. S. Environmental Protection Agency, Regions 9 and 10. May.
- Denton, D.L., A.L. Suer, B.S. Anderson, and J.W. Hunt. 1992. Precision of marine critical life stage tests with west coast species (abstract). In *Society of Environmental Toxicology and Chemistry (SETAC) Abstracts, 13th Annual Meeting, November 8-12, 1992*, Cincinnati, OH. Pensacola, FL: SETAC Press, 184.
- Dhaliwal, B.S., R.J. Dolan, C.W. Batts, J.M. Kelly, R.W. Smith, and S. Johnson. 1997. Warning: replacing NOECs with point estimates may not solve regulatory contradictions. *Environ. Toxicol. Chem.* 16:124-126.
- Dinnel, P.J., J. Link, and Q. Stober. 1987. Improved methodology for sea urchin sperm cell bioassay for marine waters. *Arch. Environ. Contam. Toxicol.* 16:23-32.
- Dunnett, C.W. 1964. New tables for multiple comparisons with a control. *Biometrics* 20:482-491.
- Eagleson, K.W., S.W. Tedder, and L.W. Ausley. 1986. Strategy for whole effluent toxicity evaluations in North Carolina. In *Aquatic Toxicology and Environmental Fate: Ninth Volume, ASTM STP 921*. T.M. Poston, R. Purdy, eds. American Society for Testing and Materials. Philadelphia, PA, 154-160.
- Environment Canada. 1990. *Guidance Document on Control of Toxicity Test Precision Using Reference Toxicants*. Ottawa, Ontario: Environmental Protection, Conservation and Protection. Report EPSI/RM/12.

- Environment Canada. 2000. *Guidance Document on Application and Interpretation of Single-species Tests in Environmental Toxicology*. Ottawa, Ontario: Environmental Technology Centre, Method Development and Application Section. Report EPS 1/RM/34.
- Erickson, R.J., L.T. Brooke, M.D. Kahl, F. Vende, S.L. Venter, T. Harting, P. Markee, and R.L. Spehar. 1998. Effects of laboratory test conditions on the toxicity of silver to aquatic organisms. *Environ. Toxicol. Chem.* 17(4): 572-578.
- Fulk, F.A. 1996. Whole effluent toxicity testing variability: A statistical perspective. In *Whole Effluent Toxicity Testing: An Evaluation of Methods and Prediction of Receiving System Impacts*. D.R. Grothe, K.L. Dickson, and D.K. Reed-Judkins, eds. Pensacola, FL: SETAC Press, 172–179.
- Grothe, D.R., and R.A. Kimerle. 1985. Inter- and intralaboratory variability in *Daphnia magna* effluent toxicity test results. *Environ. Toxicol. Chem.* 4(2):189–192.
- Grothe, D.R., R.A. Kimerle, and C.D. Malloch. 1990. A perspective on biological assessments. *Water Environ. Technol.* pp. 1707–1710.
- Grothe, D.R., K.L. Dickson, and D.K. Reed-Judkins, eds. 1996. *Whole Effluent Toxicity Testing: An Evaluation of Methods and Prediction of Receiving System Impacts*. Pensacola, FL: SETAC Press.
- Hunt, J.W., B.S. Anderson, S. Tudor, M.D. Stephenson, H.M. Puckett, F.H. Palmer, and M.W. Reeve. 1996. *Marine Bioassay Project Eighth Report*. Sacramento, CA: State Water Resources Control Board. Report 85-102.
- Kahn, H.D., and M.B. Rubin. 1989. Use of statistical methods in industrial water pollution control regulations in the United States. *Environ. Monitor. Assess.* 12:129–148.
- Moore, T.F., S.P. Canton, and M. Grimes. 2000. Investigation of the incidence of type I errors for chronic whole effluent toxicity testing using *Ceriodaphnia dubia*. *Environ. Toxicol. Chem.* 19(1):118-122.
- Morrison, G.E., E. Torelo, R. Comeleo, R. Walsh, A. Kuhn, R. Burgess, M. Tagliabue, and W. Green. 1989. Interlaboratory precision of saltwater short-term chronic toxicity tests. *Res. J. Wat. Pollut. Control Fed.* 61:1707-1710.
- New Jersey Department of Environmental Protection. 1994. *The Use of Chronic Whole Effluent Toxicity Testing in the New Jersey Pollutant Discharge Elimination System—An Assessment of Compliance Data*.
- North Carolina Department of Environment and Natural Resources. 1998. *North Carolina Biological Laboratory Certification/Criteria Procedures Document*. Division of Water Quality, Water Quality Section. Raleigh, NC.
- Oris, J.T., and A.J. Bailer. 1993. Statistical analysis of the *Ceriodaphnia* toxicity test: Sample size determination for reproductive effects. *Environ. Toxicol. Chem.* 12(1):85–90.
- Rosebrock, M.M., N.W. Bedwell, and L.W. Ausley. 1994. Indicators of *Ceriodaphnia dubia* chronic toxicity test performance and sensitivity. Poster presentation, Society of Environmental Toxicology and Chemistry 15th Annual Meeting. Denver, CO.

- Rue, W.J., J.A. Fava, and D.R. Grothe. 1988. A review of inter- and intralaboratory effluent toxicity test method variability. In *Aquatic Toxicology and Hazard Assessment* (10th Volume). W.J. Adams, G.A. Chapman, and W.G. Landis, eds. ASTM STP 971.
- SAS Institute. 1990. *SAS/STA User's Guide* (4th Edition), Version 6. Cary, NC.
- Sheppard, C.R. 1999. How large should my sample be? Some quick guides to sample size and the power of tests. *Mar. Pollut. Bull.* 38(6):439-477.
- Shukla, R., Q. Wang, F.A. Fulk, C. Deng, and D.L. Denton. 2000. Bioequivalence approach for whole effluent toxicity testing. *Environ. Toxicol. Chem.* 19(1):169-174.
- Southern California Toxicity Assessment Group (SCTAG). 1996. *Reference Toxicant Standardization and Use in Toxicity Testing*. J.R. Gully, R.B. Baird, P.J. Markle, and J.P. Bottomley, eds. First Report. Fountain Valley, CA.
- SCTAG. 1997. *Laboratory Practices Checklist Toxicity Testing* (3rd Edition). Fountain Valley, CA.
- Starrett, G.L., D.L. Denton, and R.W. Smith. 1993. Sensitivity of toxicity test protocols and the need for additional quality assurance requirements (abstract). In *Society of Environmental Toxicology and Chemistry (SETAC) Abstracts, 14th Annual Meeting, November 14-18, 1993*, Houston, TX. Pensacola, FL: SETAC Press, P106, p. 183.
- Thursby, G.B., J. Heltshe, and K.J. Scott. 1997. Revised approach to toxicity test acceptability criteria using a statistical performance assessment. *Environ. Toxicol. Chem.* 16:1322-1329.
- TOXIS® [computer software]. Ojai, CA: EcoAnalysis, Inc.
- TOXCALC® [computer software]. McKinleyville, CA: TidePool Scientific Software.
- USEPA. 1985. *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms* (3rd Edition). W. Peltier and C.I. Weber, eds. Environmental Monitoring Systems Laboratory. Cincinnati, OH. EPA/600/4-85/013.
- USEPA. 1988. *Short-term Methods for Estimating the Chronic Toxicity of Effects of Receiving Water to Marine/Estuarine Organisms* (1st Edition). C.I. Weber, W.B. Horning, D.J. Klemm, T.W. Neiheisel, P.A. Lewis, E.L. Robinson, J.R. Menkedick, F.A. Kessler, eds. Office of Research and Development. Cincinnati, OH. EPA/600/4-87/028.
- USEPA. 1989. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (2nd Edition). C.I. Weber, W.H. Peltier, T.J. Norberg-King, W.B. Homing, II, F.A. Kessler, J.R. Menkedick, T.W. Neiheisel, P.A. Lewis, D.J. Klemm, Q.H. Pickering, E.L. Robinson, J.M. Lazorchak, L.J. Wymer, R.W. Freyberg, eds. Office of Research and Development. Cincinnati, OH. EPA/600/4-89/001.
- USEPA. 1989a. *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs)*. Office of Research and Development. Cincinnati, OH. EPA/600-2-88-070.
- USEPA. 1989b. *Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants*. Office of Research and Development. Washington, DC. EPA/600/2-88-062.

- USEPA. 1989c. *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures*. Office of Research and Development. Washington, DC. EPA/600/3-88-035.
- USEPA. 1989d. *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures*. Office of Research and Development. Washington, DC. EPA/600/3-88-036.
- USEPA. 1991a. *Technical Support Document for Water Quality-based Toxics Control*. Office of Water. Washington, DC. EPA/505/2-90-001.
- USEPA. 1991b. *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (2nd Edition). T.J. Norberg-King, D.I. Mount, E.J. Durhan, G.T. Ankley, L.P. Burkhard, J.R. Amato, M.T. Lukasewycz, M.K. Schubauer-Berigan, and L. Anderson-Carnahan, eds. Office of Research and Development, Washington, DC. EPA/600/6-91-003.
- USEPA. 1992. *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*. T.J. Norberg-King, D.I. Mount, J.R. Amato, D.A. Jensen, and J.A. Thompson, eds. Office of Research and Development. Washington, DC. EPA/600/6-91-005F.
- USEPA. 1993. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (4th Edition). C.I. Weber, ed. Office of Research and Development. Cincinnati, OH. EPA/600/4-90/027F.
- USEPA. 1993a. *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity*. Office of Research and Development. Washington, DC. EPA/600/R-92-080.
- USEPA. 1993b. *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Identification Procedures for Acutely and Chronically Toxic Samples*. U.S. Environmental Protection Agency, Duluth, MN. EPA/600/R-92-081.
- USEPA. 1994a. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (2nd Edition). D.J. Klemm, G.E. Morrison, T.J. Norberg-King, W.H. Peltier, and M.A. Heber, eds. Office of Research and Development. Cincinnati, OH. EPA/600/4-91/003.
- USEPA. 1994b. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (3rd Edition). P.A. Lewis, D.J. Klemm, J.M. Lazorchak, T.J. Norberg-King, W.H. Peltier, and M.A. Heber, eds. Office of Research and Development. Cincinnati, OH. EPA/600/4-91/002.
- USEPA. 1994c. *Short-term Methods for Estimating the Sediment Toxicity of Effluents and Receiving Waters to Freshwater and Estuarine Organisms*. Office of Research and Development. Duluth, MN. EPA/600/R-94-001.
- USEPA. 1995. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*. G.A. Chapman, D.L. Denton, and J.M. Lazorchak, eds. Office of Research and Development. Cincinnati, OH. EPA/600/R-95-136.
- USEPA. 1996a. *NPDES Permit Writer's Manual*. Office of Water. Washington, DC. EPA/833/B-96-003.
- USEPA. 1996b. *Guide to Method Flexibility and Approval of EPA Water Methods*. EPA/821/D-96-004.

- USEPA. 1999a. *National Environmental Laboratory Accreditation Conference: Constitution, Bylaws and Standards*. Office of Research and Development. Washington, DC. EPA/600/R-99-068.
- USEPA. 1999b. *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (2nd Edition). Office of Water. Washington, DC. EPA/833/B-99-002.
- USEPA. 1999c. *Errata for Effluent and Receiving Water Toxicity Test Manuals: Acute Toxicity manuals: Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms; Short-Term methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms; and Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*. Office of Research and Development. Duluth, MN.
- USEPA. 2000a. *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 CFR Part 136). Office of Water, Office of Science and Technology. Washington, DC. EPA/821/B-00-004.
- USEPA. 2000b. *Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates* (2nd Edition). Office of Research and Development. Duluth, MN. EPA/600/R-99/064.
- Wang, Q., D.L. Denton, and R. Shukla. 2000. Applications and statistical properties of minimum significant difference-based criterion testing in a toxicity testing program. *Environ. Toxicol. Chem.* 19(1):113-117.
- Warren-Hicks, W., B.R. Parkhurst, D. Moore, and S. Teed. 1999. *Whole Effluent Toxicity Testing Methods: Accounting for Variance*. Water Environment Research Foundation. Project 95-PQL-1. ISBN 1-893664-01-5.
- Washington State Department of Ecology. 1997. *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Publication No. WQ-R-95-80.
- Washington State Department of Ecology. 1998. *Whole Effluent Toxicity (WET) Program Evaluation*. Publication No. 98-03.
- Whitehouse, P., M. Crane, C.J. Redshaw, and C. Turner. 1996. Aquatic toxicity tests for the control of effluent discharges in the UK: The influence of test precision. *Ecotoxicol.* 5:155-168.